

REMARKS

Claims 1-20 are presently pending in this application. Claims 1, 11, 14 and 20 have been amended to more particularly define the claimed invention.

It is noted that the amendments are made only to more particularly define the invention and not for distinguishing the invention over the prior art, for narrowing the scope of the claims, or for any reason related to a statutory requirement for patentability. It is further noted that, notwithstanding any claim amendments made herein, Applicant's intent is to encompass equivalents of all claim elements, even if amended herein or later during prosecution.

Claims 11 and 14 are objected to due to informalities and Applicant has amended the claims in a manner believed fully responsive to all points raised by the Examiner.

Claims 1, 5-8, 11, 14-16 and 20 stand rejected under 35 U.S.C. §102(b) as being anticipated by Vanderheiden, U.S. Pat. No. 6,049,328.

Claims 2-4 and 17-19 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Vanderheiden, U.S. Pat. No. 6,049,328, further in view of Serravalle, Jr., U.S. Pat. No. 4,631,525.

Claims 9-10 and 12-13 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Vanderheiden, U.S. Pat. No. 6,049,328, further in view of Gillespie et al., U.S. Pat. Pub. No. 2005/0024341.

These rejections are respectfully traversed in view of the following discussion.

I. APPLICANT'S CLAIMED INVENTION

The claimed invention (as defined, for example, by independent claim 1) is directed to

an electronic equipment including, a display device configured to display information and including a display surface, a touch sensor arranged on at least a part of the display surface, a guide portion configured to protrude from a surface of the touch sensor and to fringe the surface with a line configured by one of a concave portion and a convex portion as a whole, including a vertex configured as a reference position, and a controller configured to control an adjustment value in accordance with a direction of a slide operation along the guide portion from the reference position.

Conventionally, in tactile display input devices, a problem exists that a reference position of an operation for specifying a reference value for increasing or decreasing that amount of an adjustment value controlled by depression of the touch sensor from a present value cannot be identified. A direction in which the touch switch part is traced can be detected, but the amount of change in increase or decrease from the reference value can not be set, nor can the amount of change in increase or decrease from the reference value could be set. (Specification at page 2, line 15 to page 3, line 8.)

The claimed invention (e.g., as recited in claim 1), on the other hand, includes *a controller configured to control an adjustment value in accordance with a direction of a slide operation along the guide portion from the reference position*. This feature is important for easily setting the amount of change in increase or decrease from a reference value with respect to an adjustment value controlled by depression of a touch sensor on the display surface. (Specification at page 3, lines 11-15.)

II. THE ALLEGED PRIOR ART REJECTIONS

A. 35 U.S.C. § 102(b) Rejection over Vanderheiden, U.S. Pat. No. 6,049,328

The Examiner alleges that Vanderheiden, U.S. Pat. No. 6,049,328, (Vanderheiden),

teaches the invention of claims 1, 5-8, 11, 14-16 and 20. Applicant submits, however, that Vanderheiden does not teach or suggest:

“a controller configured to control an adjustment value in accordance with a direction of a slide operation along said guide portion from the reference position,” of claims 1 and 20, and

“receiving a contact input on said surface of said touch sensor adjacent to said reference position based on guiding said finger along said guide portion to said reference position,” of claim 11.

The Examiner in the Office Action alleges that Vanderheiden if teaches Applicant's claimed invention at column 12, lines 9-14. This portion of Vanderheiden discloses a user locating a reference notch 200 on the touch panel 16 to touch the touch screen 18 at an initial point of contact located on the display area 14 to invoke a vertical array of virtual buttons 46”.

Vanderheiden further teaches moving down from the initial point of contact, and thereby moving down from the reference notch 200, to provide audio descriptions of the virtual buttons 46” so that the user may tap the touch screen 18 to select a message.

In a preferred embodiment, the user moves toward the right side of the screen to locate a reference notch 200 and then touches the screen to invoke a vertical array of buttons 46” like that of the speed list 150. Moving down from the initial point of contact provides audio descriptions of the buttons 46” which allow for the selection of a direction of movement within the spoken message (e.g., forward or backward) and for the increment of movement (e.g., paragraph, sentence, word, and letter). The access button is used to select the direction and increment last touched. With each tap of the screen the message is incremented as selected. If the letter increment is chosen the message is spelled, a capability provided by storing the spoken message and its spelling or by using a text driven speech synthesizer. This same procedure may be used to navigate around in a table contained on the screen. In this case the buttons 46” provide for movement up down left and right. (Emphasis added.) (Column

12, lines 6-22.)

However, Vanderheiden fails to teach or suggest, controlling an adjustment value in accordance with a direction of a slide operation along the reference notch 200 from the initial point of contact. Vanderheiden clearly teaches that movement out of and away from the initial point of contact of the reference notch 200 controls the audio description of the virtual buttons 46”, not movement along the reference notch 200 from the initial point of contact. Thus, Vanderheiden does not teach or suggest Applicant’s claims 1, 11 and 20 which recite, “along said guide portion from the reference position.”

Additionally, the Examiner alleges that the guide portion corresponds to an edge of the touch panel 16, which is straight. However, Vanderheiden fails to teach Applicant’s claimed feature of an, “a guide portion configured to protrude from a surface of the touch sensor and to fringe the surface with a line configured by one of a concave portion and a convex portion as a whole.”

Furthermore, though a user can perform a slide operation along the straight guide portion, (the edge of touch panel 16) in Vanderheiden, it would be difficult to find a range of operation. On the other hand, in the invention, the user can find a reference position in addition to the full range of operation without looking at the touch sensor by using the guide portion according to independent claim 1 which is configured by one of a concave portion and a convex portion as a whole.

Therefore, Applicant respectfully requests the Examiner to reconsider and withdraw this rejection since the alleged prior art reference fails to teach or suggest each and every element and feature of Applicant’s claimed invention.

B. 35 U.S.C. § 103(a) Rejection over Vanderheiden, U.S. Pat. No. 6,049,328 further in view of Serravalle, Jr., U.S. Pat. No. 4,631,525

The Examiner alleges that Vanderheiden, U.S. Pat. No. 6,049,328, (Vanderheiden), further in view of Serravalle, Jr., U.S. Pat. No. 4,631,525, (Serravalle), makes obvious the invention of claims 2-4 and 17-19.

With respect to the rejection of Applicant's claims 2-4 and 17-19, Applicant respectfully submits that Vanderheiden would not have been combined with Serravalle and even if combined, the combination would not teach or suggest each and every element of the claimed invention, since Vanderheiden, as pointed out above, fails to teach or suggest:

"a controller configured to control an adjustment value in accordance with a direction of a slide operation along said guide portion from the reference position," of claims 1 and 20, and

"receiving a contact input on said surface of said touch sensor adjacent to said reference position based on guiding said finger along said guide portion to said reference position," of claim 11, for reasons analogous to the above arguments with respect to independent claims 1, 11 and 20.

Serravalle discloses a digital fader device 14 having slidably operable means 16, such as a touch-sensitive strip 16a-c, which is manually operable to different settings that are represented by a separate digital signal. ... Display elements 20a-c are selectively energized by the digital signal to indicate the relative setting of the slidably operable means 16.
(Abstract.)

Therefore, since Serravalle discloses a touch-sensitive strip 16 separately located from display elements 20, Serravalle fails to overcome the deficiencies of Vanderheiden.

Therefore, Applicant respectfully requests the Examiner to reconsider and withdraw

this rejection since the alleged prior art references (alone or in combination) fail to teach or suggest each and every element and feature of Applicant's claimed invention.

C. 35 U.S.C. § 103(a) Rejection over Vanderheiden, U.S. Pat. No. 6,049,328 further in view of Gillespie et al., U.S. Pat. Pub. No. 2005/0024341

The Examiner alleges that Vanderheiden, U.S. Pat. No. 6,049,328, (Vanderheiden), further in view of Gillespie et al., U.S. Pat. Pub. No. 2005/0024341, (Gillespie), makes obvious the invention of claims 9-10 and 12-13.

With respect to the rejection of Applicant's claims 9-10 and 12-13, Applicant respectfully submits that Gillespie would not have been combined with Vanderheiden and even if combined, the combination would not teach or suggest each and every element of the claimed invention, since Vanderheiden, as pointed out above, fails to teach or suggest:

"a controller configured to control an adjustment value in accordance with a direction of a slide operation along said guide portion from the reference position," of claims 1 and 20, and

"receiving a contact input on said surface of said touch sensor adjacent to said reference position based on guiding said finger along said guide portion to said reference position," of claim 11, for reasons analogous to the above arguments with respect to independent claims 1, 11 and 20.

Gillespie discloses a graphical user interface that comprises a touch screen and a driver coupling the touch screen to the operating system. The driver can display a plurality of icons on the touch screen, or a plurality of screen images having at least one icon, with each of the icons associated with operations on the display and/or the touch screen. (Abstract.)

However, Gillespie fails to teach or suggest an adjustment value in accordance with a

Application No. 10/664,080

14

Docket No. C14-161312M/NJK

direction of a slide operation along a guide portion from the reference position, and

therefore, Gillespie fails to overcome the deficiencies of Vanderheiden.

Therefore, Applicant respectfully requests the Examiner to reconsider and withdraw this rejection since the alleged prior art references (alone or in combination) fail to teach or suggest each and every element and feature of Applicant's claimed invention.

III. FORMAL MATTERS AND CONCLUSION


In view of the foregoing, Applicant submits that claims 1-20, all of the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

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Respectfully Submitted,


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